

U.S.S.N. 10/700,973

Claim Amendments

Please amend claims 1 and 3 as follows:

Please cancel claims 7-19

Please add new claims 20-33

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Listing of Claims:

1. (currently amended) A method of controlling the operation of hybrid power system having a fuel cell and a charge carrier comprising a DC electrical energy source, said fuel cell and said DC electrical energy source for supplying power to a load, comprising the steps of:

(A) determining a state of charge of the charge carrier;

(B) setting a power output of the charge carrier to output power at a first value if the power required by the load is less than the maximum power output available to be supplied from the fuel cell wherein the fuel cell is operating at less than said maximum power output; and,

(C) setting the power output of the charge carrier to output power at a second value if the power required by the load is equal to or greater than the maximum power output available to be supplied from the fuel cell wherein the fuel cell is operating at said maximum power output and said first and second value are greater than zero.

2. (Original) The method as set forth in claim 1, including the step of determining power required by the load.

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3. (currently amended) The method as set forth in claim 1, wherein steps (A)-[[(B)]] (C) are repeated in a manner to maintain the state-of-charge of the charge carrier within a preselected range.

4. (previously presented) The method as set forth in claim 1, wherein the first value is determined based on at least a maximum voltage of the fuel cell, and a state-of-charge of the charge carrier.

5. (previously presented) The method as set forth in claim 1, wherein the second value is determined based on a lumped system load power and a maximum power available to be supplied by the fuel cell.

6. (previously presented) The method as set forth in claim 4, wherein the second value is determined based on a lumped system load power and a maximum power available to be supplied by the fuel cell.

Claims 7-19 (canceled)

20. (new) The method as set forth in claim 1, wherein the charge carrier is selected from the group consisting of a battery pack, an ultracapacitor, and a flywheel.

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21. (new) The method as set forth in claim 1, wherein step (A) comprises monitoring the state of charge of the charge carrier.

22. (new) The method as set forth in claim 1, wherein step (B) comprises determining the amount of power being supplied by the fuel cell.

23. (new) A method of controlling the operation of hybrid power system having a fuel cell and a charge carrier comprising a DC electrical energy source, said fuel cell and said DC electrical energy source for supplying power to a load, comprising the steps of:

(A) determining a state of charge of the charge carrier;

(B) setting a power output of the charge carrier to output power at a first value if the power required by the load is less than the maximum power output available to be supplied from the fuel cell wherein the fuel cell is operating at less than said maximum power output; and,

(C) setting the power output of the charge carrier to output power at a second value if the power required by the

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load is equal to or greater than the maximum power output available to be supplied from the fuel cell wherein the fuel cell is operating at said maximum power output and said first and second value are greater than zero;

wherein steps (A)-(C) are repeated in a manner to maintain the state-of-charge of the charge carrier within a preselected range.

24. (new) The method as set forth in claim 23, including the step of determining power required by the load.

25. (new) The method as set forth in claim 23, wherein the first value is determined based on at least a maximum voltage of the fuel cell, and a state-of-charge of the charge carrier.

26. (new) The method as set forth in claim 23, wherein the second value is determined based on a lumped system load power and a maximum power available to be supplied by the fuel cell.

27. (new) The method as set forth in claim 23, wherein the charge carrier is selected from the group consisting of a battery pack, an ultracapacitor, and a flywheel.

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28. (new) The method as set forth in claim 23, wherein step
(A) comprises monitoring the state of charge of the charge carrier.

29. (new) The method as set forth in claim 23, wherein step
(B) comprises determining the amount of power being supplied by the fuel cell.

30. (new) A method of controlling the operation of hybrid power system having a fuel cell and a charge carrier comprising a DC electrical energy source, said fuel cell and said DC electrical energy source for supplying power to a load, comprising the steps of:

(A) monitoring and determining a state of charge of the charge carrier;

(B) determining the amount of power being supplied by the fuel cell;

(C) determining the power required by the load;

(D) setting a power output of the charge carrier to output power at a first value if the power required by the load is less than the maximum power output available to be

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supplied from the fuel cell wherein the fuel cell is operating at less than said maximum power output; and,

(E) setting the power output of the charge carrier to output power at a second value if the power required by the load is equal to or greater than the maximum power output available to be supplied from the fuel cell wherein the fuel cell is operating at said maximum power output and said first and second value are greater than zero;

wherein steps (A)-(E) are repeated in a manner to maintain the state-of-charge of the charge carrier within a preselected range.

31. (new) The method as set forth in claim 30, wherein the first value is determined based on at least a maximum voltage of the fuel cell, and a state-of-charge of the charge carrier.

32. (new) The method as set forth in claim 30, wherein the second value is determined based on a lumped system load power and a maximum power available to be supplied by the fuel cell.

33. (new) The method as set forth in claim 30, wherein the charge carrier is selected from the group consisting of a battery pack, an ultracapacitor, and a flywheel.